

Amendments to the abstract:

Please replace the entire Abstract with the following
Abstract of the Disclosure:

Abstract of the Disclosure

A method is capable of being used for determining an ability of a network to spread information or physical traffic. The network includes network nodes interconnected by links. The method comprises steps of: mapping a topology of the network, computing values of link strength between the nodes, computing an eigenvector centrality index for all nodes, and based on examining the eigenvector centrality of all neighboring nodes of each node, identifying nodes which are local maxima of the eigenvector centrality index as centre nodes, grouping the nodes into regions surrounding each identified centre node, assigning a role to each node from its position in a region, as centre nodes, region member nodes, border nodes, bridge nodes, dangler nodes, and measuring the susceptibility of the network to spreading, based on the number of regions, their size, and how they are connected.